



2815

Applicant: YONG-JUN HU

Title: LOW ANGLE, LOW ENERGY PHYSICAL VAPOR DEPOSITION OF ALLOYS

Docket No.: 303.098US4

Serial No.: 09/826,661

Filed: April 5, 2001

Due Date: February 26, 2003

Examiner: Joseph Nguyen

Group Art Unit: 2815

• Commissioner for Patents  
Washington, D.C. 20231

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.  
 An Amendment and Response (12 Pages).

If an additional fee is required due to changes to the claims, the fee has been calculated as follows:

CLAIMS AS AMENDED						
	(1) Claims Remaining After Amendment		(2) Highest Number Previously Paid For	(3) Present Extra	Rate	Fee
TOTAL CLAIMS	44	-	44	0	x 18 =	\$0.00
INDEPENDENT CLAIMS	8	-	8	0	x 84 =	\$0.00
[ ] MULTIPLE DEPENDENT CLAIMS PRESENTED						\$0.00
TOTAL						\$0.00

Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional required fees or credit overpayment to Deposit Account No. 19-0743.

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on this 26th day of February, 2003.

Name

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(GENERAL)



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PATENT M04:sh

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Examiner: Joseph H Nguyen  
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AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Commissioner for Patents  
Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on November 26, 2002. Please amend the above-identified patent application as follows.

In the Claims

1.- 47. (Previously Canceled)

48.(Amended) A contact hole for a semiconductor device, comprising:

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a bottom surface of a first material;  
at least one vertical sidewall of a second material;  
a generally planar layer of a third material covering only the bottom surface, the third material having a graded stoichiometry between a refractory metal and the first material two different elements.

49.(Original) The contact hole of claim 48 where the hole has a high aspect ratio.

50. (Original) The contact hole of claim 48 where the first material is silicon.

NE  
51. (Original) The contact hole of claim 48 where the second material is an insulator.

52. (Original) The contact hole of claim 48 where the planar layer contacts the sidewalls.

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